REMARKS

Claims 1-17 remain in this application. No claims have been amended, canceled or added. Applicants respectfully request reconsideration of the rejections and further examination of the application in view of the following.

Claims 1-17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Mishra et al.* (U.S. Patent No. 7,185,075). Applicants respectfully traverse this rejection.

The claimed invention relates to a method, system, and computer network element for generating a database of connection endpoints between a sub-network of network elements, where the network elements are interconnected through a high-speed network. Inventively, the network elements themselves, without assistance from the interconnecting high-speed network, are used to gather the interconnection information and feed it to a centralized element management system. More specifically, each of a number of network elements transmits source endpoint identifiers on its outgoing channels as well as receives such source endpoint identifiers from other network elements on its incoming channels. The network element associates the received source endpoint identifiers with destination endpoint identifiers and transmits the associations to the element management system, which compiles the information into a database. The database information thus describes the interconnections between network elements through the high-speed network. No resources of the high-speed network are used in gathering and compiling the information; only the network elements themselves and the element management system participate.

In contrast, *Mishra et al.* describes a software tool, referred to as "NETSMART," that system operators can use to create and manage network elements and their interconnections. Part of the management aspect involves what is sometimes referred to in the art as "snooping" the channel traffic; that is, sampling the traffic channels that carry network element configuration commands and extracting information about the status of network elements.

The Examiner cites col. 4, lines 44-59 and 60-64 of *Mishra et al.* as disclosing that network elements transmit source endpoint identifiers on their outgoing channels. Applicants respectfully disagree. The cited portion of *Mishra et al.* states:

Element Management System with Dynamic Database Updates Based on Parsed Snooping

The present application discloses a new approach to maintaining concurrency in a network element management database. A background process constantly monitors the channels which carry network element configuration commands, and automatically parses any messages which carry information about the status of network elements. The information derived from parsing these messages is then used for a dynamic update of the database of network element attributes. This means that the database is completely current on the very latest status changes, and operators do not have to cross-check log files to see if their data is current. Instead, a simple database query retrieves fully current information.

In one subclass of embodiments the information from a database query is dynamically linked into the operator's interface, so that an operator's screen will immediately reflect any relevant database updates.

Applicants respectfully submit that the above-quoted portion of *Mishra et al.* does not state or suggest that network elements themselves transmit source endpoint identifiers. Rather, it appears to describe some "background process" snooping the channel traffic channels that carry network element configuration commands and extracting information about the status of network elements. First, snooping and extracting (or parsing) messages on the channels relates to receiving information, whereas the claimed "transmitting" action relates to sending information. Sending and receiving are exact opposites. Nothing in the above-quoted portion of *Mishra et al.* relates to a network element itself sending information.

Also, while, as the Examiner observes, Fig. 24 shows a cross-connection table with a "From" column and "To" column, Applicants respectfully submit that the cross-connection information in this table or report is not derived from information snooped from source/destination association information transmitted by the network elements themselves to a

central element manager but rather is derived from cross-connections created by the system operator. For example, in col. 27, line 58 *et seq. Mishra et al.* describes "managing crossconnects" and "creating NE [Network Element] crossconnects" and refers to Figs. 19-23. Once *Mishra et al.* has described creating crossconnects, *Mishra et al.* goes on at col. 32, lines 35 *et seq.* to describe the graphical report of Fig. 24 that shows the created crossconnects. Thus, *Mishra et al.* does not disclose or suggest that network elements transmit source endpoint identifiers on their outgoing channels, as recited in Applicants' claims.

Second, Applicants' claims recite that what is sent is a source endpoint identifier, i.e., information indicating where a message came from (e.g., by its network element identifier, fiber number, and timeslot). Nothing in the above-quoted portion of *Mishra et al.* describes a network element itself transmitting information that indicates where a message came from. "Configuration" and "status" information about network elements (presumably, for example, such things as whether an element is on-line, operating properly, properly configured, etc.) is not the same as a source endpoint identifier.

The Examiner cites col. 27, lines 58-67 and Fig. 24 of *Mishra et al.* as disclosing that network elements receive source endpoint identifiers from other network elements on their incoming channels and associate those source endpoint identifiers with destination endpoint identifiers. Applicants respectfully disagree.

The cited portion of *Mishra et al.* (entitled "Managing Crossconnects") states:

> Managing Crossconnects
>
> This section provides the procedures for creating NE crossconnects. Crossconnect commands perform changes to the network and update the NETSMART database. NE crossconnect management provides the ability to modify the route for a circuit by changing the NEs and links where a signal is carried. NETSMART's graphical crossconnection feature lets you create crossconnects using a mouse click interface and lets you view and report on an end-to-end circuit through a SONET network.

Applicants respectfully submit that the above-quoted portion of *Mishra et al.* does not state or suggest that network elements themselves receive the source endpoint identifiers transmitted by other network elements on their incoming channels, let alone that the network elements then associate those source endpoint identifiers with destination endpoint identifiers. Rather, the cited section describes how a user can use the NETSMART software tool to create and manage network element crossconnects. As the crossconnects are those that the user himself has created using the NETSMART tool, then it logically follows that *Mishra et al.* cannot be suggesting that the tool does what the present invention does: "discover" what link connections may exist. (See Applicants' specification, paragraphs 0006, 0007 and 0032.) There is no need for a tool that discovers link connections, and indeed *Mishra et al.* does not appear to teach discovering link connections, where the same tool is used to create the link connections. With regard to Fig. 24, as discussed above, Fig. 24 is similarly believed to relate to creating and managing link connections.

Furthermore, *Mishra et al.* does not appear to disclose or suggest that the network elements associate any source endpoint identifiers with destination endpoint identifiers and transmit such associations to something that compiles them into a database. While the Examiner cites col. 4, lines 45-59 of *Mishra et al.* as mentioning updating a database, Applicants pointed out above that this portion of *Mishra et al.* relates to snooping and parsing message traffic. As the paragraph clearly explains, "information derived from parsing these messages is then used for a dynamic update of the database of network element attributes." Again, the information obtained by snooping the message traffic relates to status, configuration, "network element attributes," etc. The snooping and subsequent updating of a database does not appear to have anything to do with source endpoint identifiers, destination endpoint identifiers or associations between source and destination endpoint identifiers. Moreover, as also discussed above, the cited paragraph of *Mishra et al.* does not state that it is the individual network elements themselves that transmit the information to the database but rather, a (presumably centralized) "background process." Thus, *Mishra et al.* further does not disclose or suggest these features recited in Applicants' claims. As essentially none of the features recited in independent claims 1, 7 and 13 is taught or suggested in *Mishra et al.*, the claimed invention is not anticipated by

Mishra et al. The remaining (dependent) claims are also believed not to be anticipated by *Mishra et al.* for at least the reason that they depend from claims that are not anticipated.

CONCLUSION

For the above reasons, the foregoing amendment places the Application in condition for allowance. Therefore, it is respectfully requested that the rejection of the claims be withdrawn and full allowance granted. Should the Examiner have any further comments or suggestions, please contact Bobby Slaton at (972) 477-1497.

Respectfully submitted,

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Dated: August 6, 2007

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